

AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1-6. (Canceled)

7. (Previously Presented) The method of claim 16 further comprising re-mixing the surface modification agent(s) and the aerosol doped, surface-modified, pyrogenically produced oxides for 15 to 30 minutes and tempering at a temperature of 100 to 400°C for a period of 1 to 6 hours.

8. (Previously Presented) The surface-modified, pyrogenically produced oxides according to claim 15, wherein the compound is octyltrimethoxysilane.

9-14. (Canceled)

15. (Previously presented) A rapid dissolving reinforcing filler composition for organic systems comprising a reinforcing amount of surface-modified, aerosol doped-pyrogenically produced oxides wherein the dopants are selected from cerium, aluminum, potassium or salts or oxides thereof, wherein the pyrogenically produced oxides are selected from the group consisting of SiO₂, Al₂O₃, TiO₂, B₂O₃, ZrO₂, In₂O₃, ZnO, Fe₂O₃, Nb₂O₅, V₂O₅, WO₃, SnO₂ and GeO₂, and wherein the surface modification is a hydrophobic surface obtained by spraying the pyrogenic oxides, having a BET surface between 40 and 217 m²/g and dopant homogeneously distributed within the pyrogenically produced oxide, with one or several compounds selected from the group consisting of octyltrimethoxysilane (Si 108), hexamethyldisilazane (HMDS), polydimethylsiloxane (PDMS) and γ- aminopropyltriethoxysilane (AMEO).

16. (Previously presented) A method of producing aerosol doped, surface-modified pyrogenically produced oxides, comprising placing aerosol doped-pyrogenically produced oxides, having a BET surface is between 40 and 217 m²/g and dopant homogeneously distributed

within the pyrogenically produced oxide, in a suitable mixing container, spraying the oxides with water and/or acid and then spraying the oxides under intensive mixing with the surface-modification reagent or a mixture of several surface-modification reagents under conditions where oxygen is excluded, to form the aerosol doped, surface-modified, pyrogenically produced oxides, wherein the dopants are selected from cerium, aluminum, potassium, or salts or oxides thereof, wherein the oxides are selected from the group consisting of SiO_2 , Al_2O_3 , TiO_2 , B_2O_3 , ZrO_2 , In_2O_3 , ZnO , Fe_2O_3 , Nb_2O_5 , V_2O_5 , WO_3 , SnO_2 and GeO_2 , wherein the surface modification reagent or a mixture of several surface-modification reagents are selected from the group consisting of octyltrimethoxysilane (Si 108), hexamethyldisilazane (HMDS), polydimethylsiloxane (PDMS) and γ -aminopropyltriethoxysilane (AMEO).

17. (Previously presented) The surface-modified, pyrogenically produced oxides according to claim 15 wherein the dopant is potassium oxide and the pyrogenically produced oxide is silica.

18. (Previously presented) The method according to claim 16 wherein the dopant is potassium and the pyrogenically produced oxide is silica.

19. (New) A rapid dissolving reinforcing filler composition for organic systems comprising a reinforcing amount of surface-modified, aerosol doped-pyrogenically produced oxides wherein the dopant is aluminum or salts or oxides thereof, wherein the pyrogenically produced oxide is SiO_2 and wherein the surface modification is a hydrophobic surface obtained by spraying the pyrogenic oxides, having a BET surface between 40 and $217 \text{ m}^2/\text{g}$ and dopant homogeneously distributed within the pyrogenically produced oxide, with one or several compounds selected from the group consisting of octyltrimethoxysilane (Si 108), hexamethyldisilazane (HMDS), polydimethylsiloxane (PDMS) and γ -aminopropyltriethoxysilane (AMEO).

20. (New) A method of producing aerosol doped, surface-modified pyrogenically produced oxides, comprising placing aerosol doped-pyrogenically produced oxides, having a BET surface is between 40 and $217 \text{ m}^2/\text{g}$ and dopant homogeneously distributed within the pyrogenically produced oxide, in a suitable mixing container, spraying the oxides with water and/or acid and

then spraying the oxides under intensive mixing with the surface-modification reagent or a mixture of several surface-modification reagents under conditions where oxygen is excluded, to form the aerosol doped, surface-modified, pyrogenically produced oxides, wherein the dopant is aluminum, or salts or oxides thereof, wherein the oxide is SiO_2 , and wherein the surface modification reagent or a mixture of several surface-modification reagents are selected from the group consisting of octyltrimethoxysilane (Si 108), hexamethyldisilazane (HMDS), polydimethylsiloxane (PDMS) and γ -aminopropyltriethoxysilane (AMEO).